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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,077	01/20/2004	Rudolph G. Buchheit	OSU1159-174B	1428
8698	7590	06/13/2005	EXAMINER	
STANDLEY LAW GROUP LLP 495 METRO PLACE SOUTH SUITE 210 DUBLIN, OH 43017			GREEN, ANTHONY J	
			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 06/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/761,077

Applicant(s)

BUCHHEIT ET AL.

Examiner

Anthony J. Green

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3-4, 6, 8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Derwent Abstract No. 1993-271395 (abstract of Soviet Union Patent Specification No. 1758091)

The abstract teaches a coating composition for steel comprising sodium chloride, ammonium metavanadate and Fe (II) chloride tetrahydrate.

The instant claims are met by the reference. It is the position of the examiner that since tetrahydrate is present the composition is considered to be "aqueous". As for the vanadate salt this is taught by the reference. As for the supplemental metal anion it is the position of the examiner that the Fe (II) chloride tetrahydrate component of the reference meets this component. As for the substrate activator it is the position of the examiner that that sodium chloride meets this component.

4. Claims 1-4, 6, 8 and 101-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Simon (US Patent No. 4,036,667).

The reference teaches, in the examples, the addition of sodium vanadate tetrahydrate to various compositions comprising sodium dichromate, potassium fluoride dehydrate, and sodium nitroferricyanide dehydrate, and water and nitric acid to bring the pH to approximately 1.5. The coating is applied to aluminum and aluminum alloy substrate by immersion.

The instant claims are met by the reference. It is the position of the examiner that the sodium vanadate tetrahydrate component meets the instantly claimed film forming agent comprising a vanadate salt; that the sodium nitroferricyanide dehydrate component meets the supplemental soluble metal anion and that the potassium fluoride dehydrate component meets the substrate activator component absent evidence showing otherwise.

5. Claims 1-4, 6, 8 and 10-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Bengston et al (US Patent No. 6,692,583).

The reference teaches, in column 2, lines 22+ and the claims, a conversion coating composition comprising a source of vanadate ions; a material comprising phosphorus selected from various sources of phosphate, or phosphate ions etc.; nitric acid or a source of nitrate ions; and optionally but preferably boric acid or a source of borate ions; and optionally but preferably a source of fluoride ions or fluoroborate ions. The solution is an aqueous solution with a pH of between 1 and 4.

The instant claims are met by the reference. It is the position of the examiner that the source of vanadate ions meets the film forming agent, that the phosphorus material or the borate or boric acid material meets the supplemental soluble metal anion and that source of fluoride ions meets the substrate activator absent evidence showing otherwise.

6. Claims 1-4, 6, 8 and 10-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Marecic (US Patent No. 6,468,364).

The reference teaches in the examples (see Table 1) an anticorrosion treatment comprising molybdenum ions (added as ammonium molybdate), vanadium ions (added as ammonium vanadate), phosphoric acid (added as orthophosphoric acid) and fluorine (added as sodium fluoride). See column 4, lines 33+ of the reference where this is discussed. The phosphoric acid is in the form of an aqueous solution (see column 3,

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lines 34+). The pH ranges from 1.5 to 2.2 (see column 4, lines 39+) and the examples. The composition is applied by dipping.

The instant claims are met by the reference. It is the position of the examiner that the ammonium vanadate meets the film forming agent, that the ammonium molybdate and/or the orthophosphoric acid meets the supplemental soluble metal anion, and that the sodium fluoride meets the substrate activator absent evidence showing otherwise.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5, 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bengston et al (US Patent No. 6,692,583).

The reference was discussed previously. While the reference does not teach the same concentration of components it is believed that it does teach amounts that encompass those instantly claimed once they are converted to the same units as instantly claimed. One of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by the reference overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have

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been obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, particularly in view of the fact that;

“The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages”, In re Peterson 65 USPQ2d 1379 (CAFC 2003).

Also, In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934 (CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

Accordingly the instant claims appear to be rendered obvious by the reference absent evidence showing otherwise.

9. Claims 5, 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marecic (US Patent No. 6,468,364).

The reference was discussed previously. While the reference does not teach the same concentration of components it is believed that it does teach amounts that encompass those instantly claimed once they are converted to the same units as instantly claimed. One of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by the reference overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portion of the disclosed

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ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, particularly in view of the fact that;

“The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages”, In re Peterson 65 USPQ2d 1379 (CAFC 2003).

Also, In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934 (CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

Accordingly the instant claims appear to be rendered obvious by the reference absent evidence showing otherwise.

### ***Drawings***

10. New corrected drawings for Figures 1-6 in compliance with 37 CFR 1.121(d) are required in this application because Figures 1-4 are too dark and Figures 5-6 are too light. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### ***References Cited By The Examiner***

11. The remaining references are cited as showing the general state of the art and as such, they are not seen to teach or fairly suggest the instant invention.

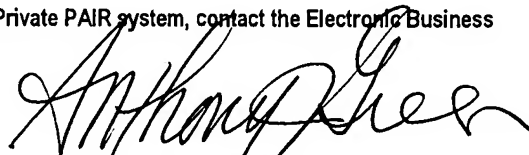


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony J. Green whose telephone number is 571-272-1367. The examiner can normally be reached on Monday-Thursday 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Anthony J. Green  
Primary Examiner  
Art Unit 1755

ajg  
June 07, 2005